

Syllabus

Wachusett Regional High School
1401 Main Street
Holden MA 01520

AF Chemistry

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Text: Modern Chemistry (copies available upon request)

Course Overview

Chemistry covers the basic principles of the makeup and transformation of substances. Emphasis is on the development of chemical concepts with the equations and calculations necessary for their understanding. Laboratory experiments are used in the development of the concepts and to illustrate proper techniques.

Learning Objectives

This course will cover topics including the periodic table, atomic structure, the dynamics of chemical reactions, solution chemistry, qualitative and quantitative behavior of gases, and acid/base chemistry. These topics will not be treated singularly, however, a heavy emphasis will be placed on how all of these topics are intertwined together.

Requirements/Expectations (see Science Dept. Philosophy on Back)

Students taking this course are expected to be hardworking, motivated, organized, and possess the appropriate math skills. Also the ability to memorize and apply information is critical to surviving chemistry. Typically students who do not possess these qualities have not done as well as they would have hoped.

All students are expected to bring a writing implement, scientific calculator (graphing calculators are prohibited), and a notebook to each class. Promptness is also required. **Any student who is tardy to class will be after school for a detention within 24 hours.**

Of course, students are expected to be to class on time with their homework completed to the best of their ability (see homework policy on back). In addition, all work must be shown when doing homework or taking a test or quiz. This is to the student's benefit as partial credit will be awarded. Any answer that does not show the student's work will result in the loss of some credit for that problem.

Students who are absent will be held accountable for the work they missed, in accordance with the student handbook. I will make my class notes available to students, and it is also a good idea to obtain the missed notes from a fellow student. A missed laboratory will need to be made within one week of the lab. Labs can be made up on the following Monday or Thursday (these days are subject to change).

NO LATE WORK WILL BE ACCEPTED

It is imperative that each student behave properly, respect each other, respect the instructor, and respect the room in which the class is taught. Inappropriate behavior will not be tolerated in any form, especially in the laboratory. Lab safety is of the utmost importance. Any misconduct during a laboratory will result in a zero for that lab assignment.

Tests, quizzes and labs vary by how many points they are worth (but are weighted fairly). Grades are calculated by calculating a percentage of points you have compared to how many you could have.

Extra Help

I will be available before or after school any day for extra help (except Friday). Preferably, I would appreciate the student making an appointment first. I am very aware how difficult this subject is and I am willing to provide support for any student who would like it. **Unfortunately, there will be no opportunities for students to do extra credit assignments.**

Department Philosophy

The Science department of Wachusett Regional High school strives for excellence in the science education of all its graduates. We recognize the fact that science is a human endeavor designed to achieve an increasingly comprehensive and reliable understanding of the human species and its environment. Scientific literacy is an important key to a functioning, technology-based society.

The learning objectives of the science department are:

- *To instill and appreciation for the study of science as a human activity worthy of academic pursuit.
- *To provide a basic understanding of how nature works in both living (life science) and non-living (physical science) systems, and to show their interrelatedness.
- *To teach students the procedures and techniques used in scientific methodology (e.g. forming a hypothesis, conducting experiments, collecting and analyzing data to draw logical conclusions, etc.)
- *To challenge and stimulate students to use, refine and communicate their powers of creative thinking, problem recognition, and problem solving in scientific application of both hypothetical and real world situations.
- *To provide a strong foundation to help our graduates achieve some level of confidence and success in their introductory college classes.

The WRHS Science Curriculum is designed to provide all students the opportunity to meet the stated objectives in a logical, sequential comprehensive and varied manner.

Science Department Homework Policy

"The WRHS Science Department believes that homework is necessary to help our students achieve at the high academic level necessary for college preparation. Schoolwork done outside of classtime provides training in study habits, skills and discipline; it reinforces and increases background knowledge and conceptual understanding, and it provides experiences in problem solving and self monitoring. In particular, it provides students with an opportunity for them to take personal responsibility for their own achievement."